

## Express Mail Mailing Label No. EL 988704823 US

PATENT

Attorney Docket No. CYC-046

JAN 29 2004

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S):

Phelps et al.

**CONFIRMATION NO.:** 

7837

SERIAL NO.:

09/974,722

**GROUP NO.:** 

1711

FILING DATE:

October 9, 2001

**EXAMINER:** 

Boykin

TITLE:

ORGANO-TITANATE CATALYSTS FOR PREPARING PURE

MACROCYCLIC OLIGOESTERS

Commissioner for Patents Washington, D.C. 20231

# FOURTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the provisions of 37 C.F.R. 1.97 and 1.98, Applicants hereby make of record the patents and publications listed on the accompanying Form PTO-1449, and other information contained herein, for consideration by the Examiner in connection with the examination of the above-identified patent application. Copies of the patents and publications are enclosed.

#### REMARKS

In accordance with the provisions of 37 C.F.R. 1.97, this statement is being filed (CHECK ONE):

91 FC:1895	01/26/2884_NROCHA1 866888888	(1)	within three (3) months of the <b>filing date</b> of a national application other than a continued prosecution application under 37 C.F.R. 1.53(d), or within three (3) months of the <b>date of entry of the national stage</b> as set forth in 37 C.F.R. 1.491 in an international application, or before the mailing of the <b>first Office action</b> on the merits or before the mailing of a <b>first Office action</b> after the filing of a request for continued examination under 37 C.F.R. 1.114; or
		(2)	after the period defined in (1) but before the mailing date of a final action or a notice of allowance under 37 C.F.R. 1.311, and
			the requisite Statement is below, OR
120	69974722	$\boxtimes$	the requisite fee under 37 C.F.R. 1.17(p), namely \$180.00, is included herein, or

Supplemental Information Disclosure Statement Serial No. 09/974,722 Page 2 of 2 after the mailing date of a final action or notice of allowance but before the payment (3) · of the issue fee, AND the requisite Statement is below, AND the requisite petition fee under 37 C.F.R. 1.17(p), namely \$180.00 is included herein. It is respectfully requested that each of the patents and publications listed on the attached Form PTO-1449, and other information contained herein, be made of record in this application. **STATEMENT** As required under 37 C.F.R. 1.97(e), Applicant(s), through the undersigned, hereby state either that [check the appropriate space only if either (2) or (3) is checked on the previous page and the Statement is required]: Each item of information contained in the Information Disclosure Statement was П 1. first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Information Disclosure Statement; or 2. No item of information contained in the Information Disclosure Statement was 1 cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this Statement after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of the Information Disclosure Statement.

Date:  $\sqrt{-20-09}$  No. 53,002

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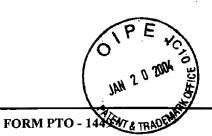
Respectfully submitted,

William R. Haulbrook, Ph.D. Attorney for the Applicants Testa, Hurwitz, & Thibeault, LLP

Min L. Hanker

High Street Tower 125 High Street

Boston, Massachusetts 02110



FOURTH SUPPLEMENTAL INFORMATION

**DISCLOSURE STATEMENT** 

Express Mail Mailing Label No. EL 988704823 US

ATTORNEY DOCKET NO.: CYC-046

APPLICANT(S): Phelps et al.

SERIAL NO.: 09/974,722

JAN 29 2004
TC 1700

FILING DATE: October 9, 2001

GROUP: 1711

## **U.S. PATENT DOCUMENTS**

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A88	6,525,164 B2	02/25/03	Faler	528	279	
	A89	6,436,549 B1	08/20/02	Wang	428	480	
	A90	6,436,548 B1	08/20/02	Phelps	428	480	
	A91	6,420,048 B1	07/16/02	Wang	428	480	
	A92	6,420,047 B2	07/16/02	Winckler et al.	428	480	
	A93	6,080,834	06/27/00	Putzig et al.	528	279	
	A94	5,654,395	8/5/97	Jackson et al.	528	308.3	
	A95	5,519,108	5/21/96	You et al.	528	287	
	A96	5,237,042	8/17/93	Kim et al.	528	279	
	A97	4,909,846	3/20/90	Barfuth et al.	106	22	
	A98	4,785,060	11/15/88	Nagler	- 525	444	
	A99	4,568,703	2/4/86	Ashida	521	124	
	A100	3,090,753	5/21/63	Matuszak et al.	252	42.7	
	A101	2,628,171	02/10/53	Green	106	271	

## FOREIGN PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)
	B38	798,412	08/06/1954	GB				No	Yes
	B39	2002317041	10/31/2002	JP				No	Yes (Translation)
	B40	2002308969	10/23/2002	JP				No	Yes (Translation)
	B41	2002293902	10/9/2002	JP				No	No (only abstract in English)
	B42	2002293903	10/9/2002	JP				No	No (only abstract in English)
EXAMINER					DATE CONSIDERED				



# FOURTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

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FORM PTO - 1	1449		/	ATTORNEY DOCKET NO.: CYC-046  APPLICANT(S): Phelps et al.  SERIAL NO.: 09/974,722  FILING DATE: October 9, 2001  SHEET 2 OF 3  AN 29 2004  TC 1700  GROUP: 1711					
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	STATEMENT		•	SERIAI	SERIAL NO.: 09/974.722				
				FILING DATE: October 9, 2001 GROUP: 1711					
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B43	2002293903	10/9/2002	JP			No	Yes (Translation)		
B44	63156824 A	11/10/1988	ЛР	<u> </u>		Yes	Yes		
B45	62141063 A	06/24/1987	JP			Yes	Yes		
B46	02322272	11/08/2002	JР			Yes	Yes		
B47	02338672	11/27/2002	JP			Yes	Yes		
B48	02320499	11/05/2002	JP			Yes	Yes		
B49	11-136942	05/21/1999	JP			No	No (only abstract in English)		
B50	10-194262	07/28/1998	JP			No	No (only abstract in English)		
B51	10-069915	03/10/1998	JP			Yes	Yes		
B52	09-238806	09/16/1997	JP			No	No (only abstract in English)		
B53	09-110832	04/28/1997	JP			No	No		
B54	08-093594	04/09/1996	JP			No	No (only abstract in English)		
B55	03/031496 A1	04/17/2003	wo			No	Yes		
B56	02/098946 A1	12/12/2002	wo			No	Yes		
B57	01/56694 A1	08/09/2001	wo			No	Yes		
B58	99/25485	05/27/1999	wo			No	Yes		
B59	96/22319	07/25/1996	wo			No	Yes		
B60	95/00574	01/05/1995	wo		<del>  </del>	No	Yes		
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FORM PTO - 1449

FOURTH SUPPLEMENTAL INCORMAN ON DISCLOSURE STATEMENT

ATTORNEY DOCKET NO.: CYC-046

APPLICANT(S): Phelps et al.

SERIAL NO.: 09/974,722

FILING DATE: October 9, 2001

JAN 29 2004 TC 1700

GROUP: 1711

EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)							
	C23	•	aracterization of 2,2'-methylene-bis(6-t-butyl-4-methyl-and tantalum," <i>Polyhedron</i> , Vol. 16, No. 17, (1997) pp. 2941-					
=	C24	C24 Durfee et al. "Chemical and Electrochemical Reduction of Titanium (IV) Aryloxides," <i>Inorganic Chemistry</i> 24 (1985) pp. 4569-4573.						
	C25	Fantacci et al. "Density Functional Study of Tetraphenolate and Calix[4]arene Complexes of Early Transition Metals," <i>Inorganic Chemistry</i> , 40 (2001) pp. 1544-1549.						
	C26	Hamb et al. "Synthesis of Cyclic Tris(Ethyle	ene Terephthalate), "Polymer Letters, 5 (1967), pp. 1057-1058.					
	C27	Okuda et al. "Synthesis and Characterization of Mononuclear Titanium Complexes Containing a Bis(phenoxy) Ligand Derived from 2,2'-Methylene-bis(6-tert-butyl-4-methylphenol)," Chem. Ber., Vol. 128, (1995) pp. 221-227.						
	C28	Toth et al. "Towards supported catalyst models: the synthesis, characterization, redox chemistry, and structures of the complexes Ti(Oar')4 (Ar' = C <sub>6</sub> H <sub>4</sub> (2-t-Bu), C <sub>6</sub> H(2,3,5,6-Me) <sub>4</sub> )," Canadian Journal of Chemistry, Vol. 69, (1991) pp. 172-178.						
	C29	Youk et al. "Polymerization of Ethylene Terephthalate Cyclic Oligomers with Antimony Trioxide," Macromolecules, 33 (2000), pp. 3594-3599.						
EXAMIN	ER		DATE CONSIDERED					

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